

# RatingsDirect®

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## Federal Home Loan Banks

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### Table Of Contents

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Major Rating Factors

Rationale

Outlook

GRE Analysis: Critical Public-Policy Role And Integral Link To The Government

Profile And Ownership: A Cooperative Owned By Its Member Institutions

Related Criteria

# Federal Home Loan Banks

## Major Rating Factors

None

Strengths:	Weaknesses:
<ul style="list-style-type: none"> <li>• Government-related entity (GRE) with an almost certain likelihood of extraordinary government support</li> <li>• Critical public-policy role as one of the primary liquidity providers to U.S. mortgage market participants, especially in times of stress</li> <li>• Integral link to the U.S. government, given its special public status as a U.S. government-sponsored enterprise (GSE) and unusual credit advantages conveyed by the related legal framework</li> <li>• Excellent asset quality in the fully collateralized wholesale lending portfolio</li> </ul>	<ul style="list-style-type: none"> <li>• Uncertainty related to potential legislative changes associated with broader housing finance reform</li> <li>• Challenges to broad-based growth in advances</li> <li>• Small, but growing, exposure to nondepository financial institutions</li> </ul>

## Rationale

The ratings on the senior debt of the Federal Home Loan Banks (FHLB System) reflect S&P Global Ratings' view of the almost certain likelihood that the FHLB System would receive extraordinary support from the U.S. government, if needed. This is based on the system's integral link with the government and critical role in promoting homeownership and providing funding to U.S. banks. Therefore, our ratings on the system's debt are at the same level as the U.S. sovereign ratings, even though the U.S. government does not explicitly guarantee the FHLB System's debt.

We view the FHLB System as one of the most important U.S. GREs. In our opinion, promoting homeownership is a central and long-standing aspect of U.S. policy, which we do not expect will change. We believe that within the U.S. housing finance framework, the FHLB System has a critical public-policy role as one of the most important national liquidity providers to U.S. mortgage lenders, particularly during stressful conditions, when private-sector liquidity often proves unreliable.

We view the FHLB System as having an integral link to the U.S. government, given its special public status as a U.S. GSE and unusual advantages conveyed by the related legal framework. These advantages generally include lien priority over other creditors in the event of the failure of an insured depository member to whom the system had loans outstanding. We also believe the Federal Housing Finance Agency (FHFA; the Federal Home Loan Banks' regulator)

has clear and robust processes and procedures that enable effective governance, monitoring, and control of the FHLB System. These include administrative capacity and mechanisms for responding to any financial distress the system might encounter in a timely manner.

The FHLB System has a diverse and global investor base, and it readily sells its debt at a small spread to U.S. Treasury obligations. In our opinion, the FHLBanks' exceptionally favorable funding advantages are likely to continue so long as their policy role remains critical, and their link integral, to the U.S. government. Moreover, based on the track record of plentiful funding for the FHLB System during the market stress of 2008, we believe access to funding is unlikely to be problematic, even in stress scenarios.

The system has increased its reliance on short-term funding in response to its members' demands. However, given the generally match-funded approach to issuance, as well as the overcollateralization of advances to members, we believe that the tenor of the system's funding remains manageable. The FHLBanks' principal investments are GSE mortgage-backed securities, federal funds sold, interest-bearing deposits, reverse repurchase agreements, and municipal and Treasury securities.

The FHLB System consists of the 11 Federal Home Loan Banks (FHLBanks). We assign stand-alone credit profiles (SACPs) to each of the FHLBanks, but not to the system as a whole. Because the system issues consolidated debt obligations on behalf of its component FHLBanks, and in light of their joint and several liability for these obligations, we have issue ratings on the system's debt.

The issuer credit ratings on the FHLBanks are one notch higher than their 'aa' SACPs because, in our view, the likelihood of the government providing extraordinary support to them, if needed, is very high.

We view the FHLBanks' business positions as strong, reflecting their established market positions in their districts, recurring business volumes, and public policy role, which we believe offset some of the risks associated with their lack of business diversity.

We view the FHLBanks' capitalization as very strong, based on their member-capitalized co-op structure and low-risk collateralized lending business. As a result, we expect their risk-adjusted capital ratios, based on our measure, to remain higher than 15%.

Another factor supporting our ratings is that none of the FHLBanks has ever suffered a loss on a collateralized advance to a member (reflecting both the lien priority and substantial collateral held against advances).

## Outlook

Our outlook on the FHLB System debt ratings is stable, in line with the stable outlook on the U.S. sovereign rating. We expect the likelihood of extraordinary government support for the FHLB System, if needed, to remain almost certain for at least the next two years. If we changed our rating or outlook on the U.S., we would reflect that change in our ratings and outlook on the FHLB System's debt.

Longer term, the FHLB System is subject to uncertainty related to potential legislative changes associated with broader reform of U.S. housing finance policies. If initiatives were to gain momentum and target substantial changes to the FHLB System, such that the role of the FHLB System in housing finance is diminished, we could lower our ratings on the system's debt. To date, however, such initiatives have neither succeeded in gathering substantial political momentum nor targeted the FHLB System.

## GRE Analysis: Critical Public-Policy Role And Integral Link To The Government

We view the FHLB System as one of the most important U.S. GREs. In our opinion, promoting homeownership is a central and long-standing U.S. policy, evidenced by the tax-deductibility of mortgage interest and the various activities of the U.S. Department of Housing and Urban Development, for example. Such policies have, arguably, contributed to past U.S. housing market excesses. However, we do not expect this essential policy orientation to substantially change, given its widespread political appeal and the importance of consumption to U.S. economic growth (and homeownership to consumption, via wealth effects).

In our opinion, the FHLB System's critical public-policy role to U.S. housing finance was clearly demonstrated in the U.S. mortgage crisis of 2008, during which advances (loans to client-owner members) outstanding peaked at \$1 trillion. Since then, with the ebb in financial stress, advances have declined as member institutions regained access to alternative funding sources, particularly deposits. In addition, the system provides some support for affordable housing and community investment programs. The FHLB System's combined assets were \$1.082 trillion and advances totaled \$671 billion as of March 31, 2019.

Although the government does not guarantee the FHLB System's obligations, the system's status as a U.S. GSE provides several advantages. For example, FHLB securities are eligible to be used for collateral the U.S. Federal Reserve Banks are required to hold against currency they have put into circulation. The FHLB System is also exempt from almost all corporate taxation, and the securities it issues are exempt from state and local income tax. In addition, the U.S. legal framework gives the FHLB System lien priority over other creditors (including depositors) in the event of the failure of an insured depository member to whom the system had loans outstanding. Reinforcing these links to the government, the FHFA oversees all strategic decisions the system makes, and it closely monitors the system's financial condition.

We view the GSE Credit Facility (GSECF), temporarily established by the U.S. Treasury Department in 2008, as a clear indicator of the government's willingness and ability to provide extraordinary support to the FHLB System in time of stress. The GSECF proactively offered government-loan liquidity to the FHLB System (along with Fannie Mae and Freddie Mac), if needed, asking nothing more than the system's own advances as collateral.

Finally, despite the absence of a government guarantee, we believe a close association between the system and the government is well-entrenched in the minds of investors and other financial-market participants. Together with a substantial amount of system securities outstanding (\$1.05 trillion as of June 30, 2019), this association could mean, we believe, that substantial financial distress for the system could negatively affect the U.S. government's reputation, providing it additional incentive to support its GSEs. Supporting this belief, FHLBank consolidated obligations continue to price at a narrow spread over U.S. Treasuries, affording the FHLBanks and their member institutions low funding costs, despite the substantial volume outstanding.

In our rating analysis, we differentiate between the aggregate FHLB System and the individual FHLBanks. We classify an individual FHLBank's role as very important and its link to the government as very strong.

Because the 11 FHLBanks have joint and several liability for the senior unsecured debt obligations that the FHLBanks Office of Finance issues, we believe that weakness in a single FHLBank could have an impact on investors' perception of the strength of the FHLB System as a whole. On the other hand, we believe each FHLBank is less important, from a policy perspective, than the FHLB System as a whole. This is reflected in our assessing both the role and the link of each individual FHLBank as one degree weaker than our assessment for the system as a whole.

## **Profile And Ownership: A Cooperative Owned By Its Member Institutions**

Each FHLBank is owned by its private-sector member financial institutions. The member institutions are primarily commercial and savings banks, though they have expanded to include credit unions, insurance companies, and community-development financial institutions (CDFIs). The membership mix as of June 30, 2019, was 65.6% commercial banks, 15.9% credit unions, 12.7% savings institutions, 5.0% insurance companies, and 0.8% CDFIs.

A member institution must purchase capital to belong to an FHLBank. The member institution's stock requirement is generally based on its use of FHLBank products, subject to a minimum requirement. In return, the member institution may borrow on a secured basis at typically attractive rates from its FHLBank. In addition, member institutions may receive dividends on their shares in the FHLBank, which helps to lower their total transaction funding costs.

FHLBanks provide their members with a reliable source of funding for housing finance, community lending, and asset-liability management, as well as liquidity for members' short-term needs. This funding is in the form of long-term and short-term secured loans, called "advances," to their members. These advances are primarily collateralized by residential mortgage loans, as well as government and agency securities. Community financial institutions may also pledge small business, small farm, small agri-business, and community development loans as collateral for advances.

In addition to advances, letters of credit by the FHLBanks have increased significantly in the past several years. Such letters of credit totaled \$164.7 billion as of June 30, 2019, a \$112.2 billion increase since the first quarter of 2012.

Members typically use letters of credit to secure public unit deposits, and the letters of credit would be converted to an advance if drawn. However, draws on them are rare.

Although privately owned, the system is run as a cooperative for the benefit of its member-owners (private-sector financial services companies). The system places more emphasis on retaining the capacity to quickly increase liquidity provision, when needed, than on maximizing current profits. We believe the FHFA's close oversight reinforces this strategic orientation.

The FHLBs have recently been moving toward floating-rate bonds replacing discount notes in response to market demand and to address the FHFA's concerns regarding maturity gaps, though in many cases the bonds are short term. Short-term funding (with a remaining maturity of less than one year) made up 78% of consolidated obligations as of June 30, 2019. We believe that the system's transition from LIBOR-based funding toward SOFR-based funding could be smoother than at other issuers given this larger percentage of short-term debt.

In addition, in our view, the individual FHLBanks are adequately prepared for the FHFA's revised liquidity guidelines. These guidelines include a requirement that all FHLBanks must maintain a liquidity reserve of up to 30 days of projected funding needs assuming an inability to access capital markets for consolidated obligations and renewal of all maturing advances.

#### Peer Comparison For Federal Home Loan Banks

(Mil. US\$)	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
Cash and due from banks	95	29	27	22	52	218	76	49	66	23	12
Investments, including MBS	28,197	7,566	22,519	25,088	21,370	21,589	16,677	25,949	14,119	19,301	12,427
Securities purchased under agreements to resell	4,500	5,000	2,550	3,301	5,135	9,450	4,250	9,285	2,250	8,750	3,994
Interest-bearing deposits+Federal funds sold	13,948	1,397	11,670	14,055	5,901	8,101	3,514	9,240	9,146	7,129	3,022
Advances	101,776	37,097	51,141	42,869	38,779	101,288	33,891	102,429	81,827	67,189	31,099
Mortgage loans, net	328	4,421	8,265	10,639	3,034	8,324	11,364	2,986	4,666	3,327	9,192
Other	848	270	387	450	247	504	378	636	446	1,043	332
Total assets	149,692	55,780	96,559	96,424	74,518	149,474	70,150	150,574	112,521	106,762	60,078
<b>Asset composition (% total assets)</b>											
Cash and due from banks	0.06	0.05	0.03	0.02	0.07	0.15	0.11	0.03	0.06	0.02	0.02
Investments, including MBS	18.84	13.56	23.32	26.02	28.68	14.44	23.77	17.23	12.55	18.08	20.68
Securities purchased under agreements to resell	3.01	8.96	2.64	3.42	6.89	6.32	6.06	6.17	2.00	8.20	6.65

## Peer Comparison For Federal Home Loan Banks (cont.)

(Mil. US\$)	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
Interest-bearing deposits+Federal funds sold	9.32	2.50	12.09	14.58	7.92	5.42	5.01	6.14	8.13	6.68	5.03
Advances	67.99	66.51	52.96	44.46	52.04	67.76	48.31	68.03	72.72	62.93	51.76
Mortgage loans	0.22	7.93	8.56	11.03	4.07	5.57	16.20	1.98	4.15	3.12	15.30
Other	0.57	0.48	0.40	0.47	0.33	0.34	0.54	0.42	0.40	0.98	0.55
<b>Advance concentrations: Top 5 concentrations (%)</b>											
Q2 2019	56	30	60	55	40	60	42	59	80	64	63
Q1 2019	55	23	59	67	41	62	41	60	79	65	65
AR 2018	55	35	59	65	38	60	40	54	77	62	57
AR 2017	56	30	59	62	29	59	44	64	77	62	52
AR 2016	54	39	59	70	26	70	43	64	80	65	53
AR 2015	59	39	60	72	26	57	43	55	74	62	55
AR 2014	61	37	65	78	24	66	40	62	74	53	47
<b>Net income</b>											
Q2 2019	93.000	36	76	64	54	96	35	108	68	49	32
Q1 2019	101.000	54	77	73	58	112	33	135	98	104	53
AR 2018	416.000	217	303	339	199	460	195	560	347	360	170
AR 2017	349.000	190	317	314	150	518	156	479	340	376	197
AR 2016	278.000	173	327	268	79	649	113	401	260	712	162
AR 2015	301.000	289	349	254	67	131	121	415	257	638	93
AR 2014	271.000	150	392	254	49	121	117	315	256	205	106
<b>Return on average assets (%)</b>											
Q2 2019	0.25	0.27	0.31	0.26	0.31	0.26	0.20	0.29	0.27	0.18	0.22
Q1 2019	0.28	0.37	0.32	0.28	0.35	0.31	0.21	0.38	0.38	0.37	0.40
AR 2018	0.27	0.35	0.33	0.32	0.29	0.31	0.30	0.36	0.36	0.32	0.31
AR 2017	0.25	0.32	0.38	0.31	0.25	0.31	0.26	0.32	0.35	0.36	0.37
AR 2016	0.20	0.29	0.42	0.25	0.15	0.40	0.22	0.31	0.28	0.77	0.33
AR 2015	0.23	0.52	0.49	0.24	0.16	0.12	0.27	0.34	0.29	0.76	0.21
AR 2014	0.21	0.29	0.55	0.25	0.14	0.14	0.30	0.25	0.36	0.24	0.30
<b>Duration gap (in months)</b>											
Q2 2019	(0.6)	(1.5)	0.2	(0.1)	(1.8)	(0.2)	1.5	(0.5)	(0.5)	1.0	(0.2)
Q1 2019	(0.7)	(0.8)	0.1	-	(1.4)	-	0.8	(0.5)	(0.2)	0.7	-
AR 2018	0.6	(0.2)	0.5	-	(1.3)	0.3	1.1	(0.4)	(0.2)	0.7	0.8
AR 2017	0.2	(0.3)	0.9	-	(0.2)	0.5	1.2	(0.5)	(0.2)	1.1	(1)
AR 2016	0.4	1.2	1.0	-	(0.7)	0.4	0.3	(0.2)	(0.1)	1.2	(0.6)
AR 2015	(0.1)	0.1	0.5	-	(0.6)	(1.1)	0.7	(0.8)	(0.6)	1.4	0.5
AR 2014	(0.4)	-	(0.2)	-	0.2	(0.6)	(0.9)	(0.8)	(0.5)	0.4	(0.6)
<b>Regulatory capital ratio (%)</b>											
Q2 2019	4.9	6.15	5.9	5.1	5.0	5.1	4.7	5.0	4.7	6.1	4.2

## Peer Comparison For Federal Home Loan Banks (cont.)

(Mil. US\$)	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
Q1 2019	5.0	6.23	5.9	5.0	5.2	5.1	4.9	5.2	5.0	6.0	4.3
AR 2018	4.9	6.22	6.0	5.4	5.0	5.3	4.9	5.4	5.0	6.0	5.1
AR 2017	4.9	6.01	6.0	4.9	4.8	5.0	4.8	5.2	4.8	5.5	5.2
AR 2016	4.9	5.95	6.4	4.8	4.7	4.5	4.7	5.4	4.7	6.4	4.3
AR 2015	4.9	6.04	6.6	4.4	5.5	4.2	4.7	5.6	4.6	6.3	4.2
AR 2014	5.0	6.56	6.0	4.7	5.1	4.4	5.6	5.0	4.5	8.4	4.4
<b>Private-label mortgage-backed securities</b>											
Residential PLMBS - AFS - amortized cost	721	0	31	0	0	0	0	0	311	2,625	0
OTTI in AOCI	(1)	0	0	0	0	0	0	0	0	(15)	0
Gross unrealized gains	57	0	7	0	0	0	0	0	61	319	0
Gross unrealized losses	0	0	0	0	0	0	0	0	(0)	0	0
Est. fair value	777	0	38	0	0	0	0	0	371	2,929	0
Residential PLMBS - HTM - amortized cost	357	623	440	0	70	9	0	5	173	504	0
OTTI in AOCI	0	(117)	(101)	0	(10)	0	0	(0)	0	(2)	0
Carrying value	357	506	339	0	60	9	0	5	173	502	0
Gross unrealized gains	4	221	214	0	13	0	0	0	2	9	0
Gross unrealized losses	(1)	(2)	0	0	(1)	0	0	(0)	(0)	(7)	0
Est. fair value	360	725	553	0	72	9	0	5	175	504	0
<b>Capital</b>											
Actual risk-based capital	7,335	3,429	5,664	4,866	3,745	7,627	3,316	7,595	5,286	6,502	2,552
Min. required risk-based capital	1,509	556	1,098	746	1,003	1,270	721	948	1,007	1,729	410
Excess over risk-based capital	5,826	2,873	4,566	4,120	2,742	6,357	2,595	6,647	4,278	4,773	2,141
<b>Other than temporary impairments in accumulated other comprehensive income</b>											
Q2 2019	56	(117)	(101)	-	(10)	-	-	(9)	61	302	-
Q1 2019	64	(123)	(108)	-	(10)	-	-	(10)	65	298	-
AR 2018	72	(129)	(114)	-	(11)	-	-	(11)	65	284	-
AR 2017	134	(158)	(143)	-	(14)	-	29	(15)	73	331	(4)
AR 2016	124	(192)	(177)	-	(17)	-	27	(30)	67	127	(6)
AR 2015	95	(230)	(217)	-	(21)	-	30	(37)	73	29	(8)
AR 2014	118	(276)	(264)	-	(27)	-	38	(44)	94	68	(12)
<b>Retained earnings</b>											
Q2 2019	2,138,000	1,416	3,663	1,037	1,155	2,120	1,093	1,748	1,299	3,397	950
Q1 2019	2,126,000	1,412	3,608	1,031	1,121	2,092	1,084	1,728	1,304	3,400	943



## Peer Comparison For Federal Home Loan Banks (cont.)

(Mil. US\$)	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
AR 2018	2,110.000	1,395	3,536	1,023	1,081	2,050	1,078	1,694	1,276	3,346	914
AR 2017	2,003.000	1,308	3,297	940	942	1,839	976	1,546	1,158	3,245	840
AR 2016	1,892.000	1,217	3,020	834	824	1,450	887	1,412	986	3,056	735
AR 2015	1,840.000	1,129	2,730	738	762	801	835	1,270	881	2,628	652
AR 2014	1,746.000	902	2,406	656	701	720	778	1,083	838	2,359	628
<b>OTTI in AOCI/retained earnings (%)</b>											
Q2 2019	2.6	(8.2)	(2.8)	-	(0.8)	-	-	(0.5)	4.7	8.9	-
Q1 2019	3.0	(8.7)	(3.0)	-	(0.9)	-	-	(0.6)	5.0	8.8	-
AR 2018	3.4	(9.3)	(3.2)	-	(1.0)	-	-	(0.7)	5.1	8.5	-
AR 2017	6.7	(12.1)	(4.3)	-	(1.4)	-	3.0	(1.0)	6.3	10.2	(0.5)
AR 2016	6.6	(15.8)	(5.9)	-	(2.1)	-	3.0	(2.1)	6.8	4.2	(0.8)
AR 2015	5.2	(20.4)	(7.9)	-	(2.8)	-	3.6	(2.9)	8.3	1.1	(1.2)
AR 2014	6.8	(30.6)	(11.0)	-	(3.9)	-	4.9	(4.1)	11.3	2.9	(1.9)

Note: Information is as of June 30, 2019, unless otherwise indicated.

## Related Criteria

- Criteria | Governments | Sovereigns: Sovereign Rating Methodology, Dec. 18, 2017
- Criteria | Financial Institutions | General: Risk-Adjusted Capital Framework Methodology, July 20, 2017
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria | Financial Institutions | General: Issue Credit Rating Methodology For Nonbank Financial Institutions And Nonbank Financial Services Companies, Dec. 9, 2014
- Criteria | Financial Institutions | General: Nonbank Financial Institutions Rating Methodology, Dec. 9, 2014
- Criteria | Financial Institutions | Banks: Quantitative Metrics For Rating Banks Globally: Methodology And Assumptions, July 17, 2013
- Criteria | Financial Institutions | Banks: Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria | Financial Institutions | Banks: Commercial Paper I: Banks, March 23, 2004

## Ratings Detail (As Of August 28, 2019)\*

### Federal Home Loan Banks

Senior Unsecured	AA+
Senior Unsecured	AA+/A-1+
Senior Unsecured	AA+/Stable
Short-Term Debt	A-1+

## Ratings Detail (As Of August 28, 2019)\*(cont.)

**Sovereign Rating**

United States	AA+/Stable/A-1+
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**Related Entities****Federal Home Loan Bank of Atlanta**

Issuer Credit Rating	AA+/Stable/A-1+
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**Federal Home Loan Bank of Boston**

Issuer Credit Rating	AA+/Stable/A-1+
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**Federal Home Loan Bank of Chicago**

Issuer Credit Rating	AA+/Stable/A-1+
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**Federal Home Loan Bank of Cincinnati**

Issuer Credit Rating	AA+/Stable/A-1+
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**Federal Home Loan Bank of Dallas**

Issuer Credit Rating	AA+/Stable/A-1+
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**Federal Home Loan Bank of Des Moines**

Issuer Credit Rating	AA+/Stable/A-1+
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**Federal Home Loan Bank of Indianapolis**

Issuer Credit Rating	AA+/Stable/A-1+
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**Federal Home Loan Bank of New York**

Issuer Credit Rating	AA+/Stable/A-1+
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**Federal Home Loan Bank of Pittsburgh**

Issuer Credit Rating	AA+/Stable/A-1+
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**Federal Home Loan Bank of San Francisco**

Issuer Credit Rating	AA+/Stable/A-1+
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**Federal Home Loan Bank of Topeka**

Issuer Credit Rating	AA+/Stable/A-1+
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\*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

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